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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/616,977

Filing Date: July 14, 2000

Appellant(s): ZLOTNICK, AVIAD

S. Peter Ludwig Reg. No. 25,351 For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 17 August 2007 appealing from the Office action mailed 1 February 2007.

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#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

#### (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

# (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

# (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

#### (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

#### (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

## (8) Evidence Relied Upon

33531
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Lorie

8-1999

6243450

Jansen et al.

6-2001

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6028970

DiPiazza et al.

2-2000

# (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 5-11, 19, 23-29, and 35-36 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Lorie (US 5933531, patented 3 August 1999) and further in view of Jansen et al. (US 6243450, filed 28 December 1998, hereafter Jansen).

As per independent claim 1, Lorie discloses a method for processing document including information in a predefined domain, the method comprising:

- Defining a directory of data relating to the predefined domain (column 1, line 64column 2, line 9; column 5, lines 9-12)
- Receiving from a client via a computer network images of a number of fields
   containing respective information (column 1, lines 16-30; column 8, lines 50-67)
- Processing the images to code the information (column 1, lines 31-36)
- Looking up the coded information in the directory so as to check whether the information is coded correctly (column 1, line 64- column 2, line 9)
- Returning the checked coded information (Figure 1)

Lorie fails to specifically disclose receiving payment for a service based upon a price per unit of service. However, Jansen discloses receiving payment for a service based upon a price per unit of service (abstract).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Lorie's method with Jansen's method, since it would have allowed a user to receive payment for the use of service over the internet (Jansen: column 2, lines 9-11).

As per dependent claim 5, Lorie and Jansen disclose the limitations similar to those in claim 1, and the same rejection is incorporated herein. Lorie further discloses the method wherein receiving the images comprises receiving images of alphanumeric characters in the fields (column 1, lines 21-36).

As per dependent claim 6, Lorie and Jensen disclose the limitations similar to those in claim 5, and the same rejection is incorporated herein. Lorie further discloses the method wherein the documents include a template delineating the fields, and wherein receiving the images of the characters comprises receiving the images of the characters filled into the fields and remaining after drop-out of the template from the image of the fields (column 1, lines 16-30).

As per dependent claim 7, Lorie and Jansen disclose the limitations similar to those in claim 5, and the same rejection is incorporated herein. Lorie further discloses the method wherein processing the images comprises applying computerized optical character recognition (OCR) to code the characters (column 1, lines 31-36).

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As per dependent claim 8, Lorie and Jensen disclose the limitations similar to those in claim 7, and the same rejection is incorporated herein. Lorie further discloses the method wherein looking up the coded information comprises selecting a preferred reading of the characters from among two or more possible readings generated by the OCR, responsive to the data in the directory (column 4, lines 19-32).

As per dependent claim 9, Lorie and Jensen discloses the limitations similar to those in claim 7, and the same rejection is incorporated herein. Lorie further discloses the method wherein looking up the coded information comprises generating a confidence score, and wherein processing the images comprises passing the images to a human operator for coding when the confidence score is below a predetermined threshold (column 5, lines 1-54).

As per dependent claim 10, Lorie and Jensen disclose the limitations similar to those in claim 7, and the same rejection is incorporated herein. Lorie further discloses the method wherein looking up the coded information comprises detecting an error in the coded characters and correcting the error using the data in the directory (column 4, lines 19-32: Here, the context analyzer attempts to correct errors based upon the context of the data).

As per dependent claim 11, the applicant discloses the limitations similar to those in claim 10. Claim 11 is similarly rejected.

As per independent claim 19, the applicant discloses the limitations similar to those in claim 1. Claim 19 is similarly rejected.

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As per dependent claim 23, the applicant discloses the limitations similar to those in claim 5. Claim 23 is similarly rejected.

As per dependent claim 24, the applicant discloses the limitations similar to those in claim 6. Claim 24 is similarly rejected.

As per dependent claim 25, the applicant discloses the limitations similar to those in claim 7. Claim 25 is similarly rejected.

As per dependent claim 26, the applicant discloses the limitations similar to those in claim 8. Claim 26 is similarly rejected.

As per dependent claim 27, the applicant discloses the limitations similar to those in claim 9. Claim 27 is similarly rejected.

As per dependent claim 28, the applicant discloses the limitations similar to those in claim 10. Claim 28 is similarly rejected.

As per dependent claim 29, the applicant discloses the limitations similar to those in claim 11. Claim 29 is similarly rejected.

As per independent claim 35, the applicant discloses the limitations similar to those in claim 1. Claim 35 is similarly rejected.

As per dependent claim 36, the applicant discloses the limitations similar to those in claim 7. Claim 36 is similarly rejected.

Claims 4 and 22 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Lorie and Jensen and further in view of DiPiazza et al. (US 6028970, patented 22 February 2000, hereafter DiPiazza).

As per dependent claim 4, Lorie and Jensen disclose the limitations similar to those in claim 1, and the same rejection is incorporated herein. Lorie fails to specifically disclose defining the directory comprises selecting data specific to the predefined domain from one or more general databases. However, DiPiazza discloses defining the directory comprises selecting data specific to the predefined domain from one or more general databases (column 3, line 36- column 4, line 23; column 1, lines 7-14: Here, a context type is selected from a plurality of context types. Within each context type, rule bases are applied to detect possible errors related to the context type. Further, the rule bases are stored within a database where they can be updated via real-time learning).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Lorie and Jensen's method with DiPiazza's method, since it would have allowed a user to validate scanned data in context against a plurality of rules to ensure more accurate recognized text (DiPiazza: column 3, lines 36-58).

As per dependent claim 22, the applicant discloses limitations similar to those in claim 1. Claim 22 is similarly rejected.

Claims 12-16, 18, 30-34, and 37 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Lorie and further in view of DiPiazza.

As per independent claim 12, Lorie discloses a method for processing forms, each form including a field that is filled in with information in a predefined domain, the method comprising:

Defining, in advance of reading out contents of the forms for processing, a
directory of data relating to the predefined domain (column 1, line 64- column 2,
line 9; column 5, lines 9-12)

- Receiving from a client via a computer network the information that is filled into the field on the forms by a plurality of users in communication with the client (column 1, lines 16-30; column 8, lines 50-67)
- Checking whether the information is correct by looking up the information in the directory (column 1, line 64- column 2, line 9)

However, DiPiazza discloses defining the directory comprises selecting data specific to the predefined domain from one or more general databases (column 3, line 36- column 4, line 23; column 1, lines 7-14: Here, a context type is selected from a plurality of context types. Within each context type, rule bases are applied to detect possible errors related to the context type. Further, the rule bases are stored within a database where they can be updated via real-time learning).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Lorie and Jensen's method with DiPiazza's method, since it would have allowed a user to validate scanned data in context against a plurality of rules to ensure more accurate recognized text (DiPiazza: column 3, lines 36-58).

As per dependent claim 13, the applicant discloses limitations similar to those disclosed by Lorie with respect to claim 1. Claim 13 is similarly rejected.

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As per dependent claim 14, the applicant discloses the limitations similar to those disclosed by Lorie with respect to claim 7. Claim 14 is similarly rejected.

As per dependent claim 15 the applicant discloses limitations similar to those disclosed by Lorie with respect to claim 1. Claim 15 is similarly rejected.

As per dependent claim 16 the applicant discloses limitations similar to those disclosed by Lorie with respect to claim 1. Claim 16 is similarly rejected.

As per dependent claim 18, the applicant discloses limitations similar to those disclosed by Lorie with respect to claim 10. Claim 18 is similarly rejected.

As per independent claim 30, the applicant discloses limitations similar to those in claim 12. Claim 30 is similarly rejected.

As per dependent claim 31, the applicant discloses limitations similar to those in claim 13. Claim 31 is similarly rejected.

As per dependent claim 32, the applicant discloses limitations similar to those in claim 15. Claim 32 is similarly rejected.

As per dependent claim 33, the applicant discloses limitations similar to those in claim 16. Claim 33 is similarly rejected.

As per dependent claim 34, the applicant discloses limitations similar to those in claim 18. Claim 34 is similarly rejected.

As per independent claim 37, the applicant discloses limitations similar to those in claim 12. Claim 37 is similarly rejected.

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Claims 17 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Lorie and DiPiazza and further in view of Jensen.

As per dependent claim 17, Lorie and DiPiazza disclose the limitations similar to those in claim 12, and the same rejection is incorporated herein. Lorie fails to specifically disclose receiving payment for a service based upon a price per unit of service.

However, Jansen discloses receiving payment for a service based upon a price per unit of service (abstract).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Lorie and DiPiazza's method with Jansen's method, since it would have allowed a user to receive payment for the use of service over the internet (Jansen: column 2, lines 9-11).

#### (10) Response to Argument

The appellant's initial argument is that the prior art fails to teach or suggest receiving payment according to the number of fields processed based upon a price per field processed (page 8). The examiner has maintained all along that Lorie fails to teach the limitation. However, Jansen discloses receiving payment for a service based upon a price per unit of service (abstract). While the applicant is correct in pointing out that Jansen discloses the unit of service as being time (page 8), however, it was notoriously well known in the art at the time of the applicant's invention that many different units of service, including time, computation power used, and amount of services rendered. At the time of the applicant's invention, it was common for users to

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pay ISPs for the amount of bandwidth used above a certain threshold. The use of paying a price based upon a unit of service was thus, well known in the art at the time of the applicant's invention. The difference between charging a price based upon a number of fields processed and charging a price based upon an amount of services rendered, such as bandwidth access, is minimal, and would have subsequently been obvious to one of ordinary skill in the art. This would have afforded the advantage of providing an additional unit of measure which can be used to charge a customer. As the examiner has previously stated, it further would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Jansen with Lorie, thereby allowing a user to receive payment for a service rendered (Jansen: column 2, lines 9-11).

The appellant's second argument is based upon the belief that the prior art fails to teach a network based method of document processing (pages 9-10). This argument is based upon the appellant's belief that the prior art provides, "no mention of any sort of client, nor do they mention or even suggest that images might be sent over a computer network and coded information returned over the network (page 10)." However, as the examiner has previously pointed out, Lorie discloses the method of receiving images of fields and returning checked coded information (column 1, line 16- column 2, line 9; Figure 1). Further, Lorie specifically discloses:

"Any resulting program(s), having computer readable program code means, may be embodied or provided within one or more computer readable or usable media such as fixed (hard) drives, disk, diskettes, optical disks, magnetic tape, semiconductor memories such as read-only memory (ROM), etc, or any transmitting/receiving medium such as the Internet or other communication network or link, thereby making a computer program product, i.e., an article of manufacture, according to the invention (column 8, lines 55-63)."

Although the examiner has cited this portion before, the appellant argues that the "Examiner has not identified any reason that would have led the person of ordinary skill to transform document processing into a network-based service of the sort recited in claim 1 (page 10)." However, Lorie clearly states that the program based upon the method may be performed in a transmitting/receiving environment including the Internet or other communication networks (column 8, lines 55-63). If nothing else, Lorie at least suggests to one of ordinary skill in the art that Lorie's method may be performed over a network, which inherently includes a server and client. The applicant's arguments with respect to claims 1, 19, and 35 are not persuasive.

The appellant's third argument is based upon a belief that the prior art fails to teach using a domain-specific directory (pages 11-12). Again, the examiner disagrees. DiPiazza discloses wherein defining the directory comprises selecting data specific to the predefined domain from one or more general databases (column 3, line 36- column 4, line 23; column 1, lines 7-14). Here, DiPiazza teaches selecting a context type from a plurality of context types. Within each context type, rule bases are applied to detect possible errors related to the context type. Further, the rule bases are stored within a general database where they can be update via real-time learning. Therefore, although the content is stored within a general database, rule bases are applied to the general database to segment the database into a plurality of user selectable context types.

The appellant's fourth argument (page 13) is substantially similar to the second argument. This argument is similarly not persuasive.

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The appellant's fifth argument (page 14) is substantially similar to the third argument. This argument is similarly not persuasive.

The appellant's sixth argument is based upon the belief that the prior art fails to teach dropping out of the template (pages 14-15). Again, the examiner respectfully disagrees. Lorie discloses wherein the documents include a template delineating the fields, and wherein receiving the images of the characters comprises receiving the images of the characters filled into the fields and remaining after drop-out of the template from the image of the fields (column 1, lines 16-30). When Lorie performs OCR, Lorie does not recognize the lines of the delineated fields. The OCR results, therefore, have dropped the template from the image of the fields.

The appellant's seventh argument (pages 15-16) is substantially similar to the first argument. This argument is similarly not persuasive.

The appellant's eighth, and final argument (page 16) is substantially similar to the first argument. This argument is similarly not persuasive.

# (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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Conferees:

Stephen Hong, SPE 2178

Doug Hutton, SPE 2176

SUPERVISORY PATENT EXAMINED

SUPERVISORY PATENT EXAMINER